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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,298	10/09/2001	John W. Polley	963 P 001	5996

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EXAMINER

SIMONE, CATHERINE A

ART UNIT	PAPER NUMBER
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1772

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DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,298

Applicant(s)

POLLEY, JOHN W.

Examiner

Catherine Simone

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation “air bubble shaped” in claims 1-5, 13, 23-25, and 27-29 is deemed vague and indefinite. Clarification is requested.

The recitation “a bubble side” in claims 3, 4, 13, and 14 is deemed vague and indefinite. Clarification is requested.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1-5** are rejected under 35 U.S.C. 102(b) as being anticipated by Tricca et al. (4,574,101).

Tricca et al. discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress comprising one or more layers of an air bubble shaped closed

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cellular material (Fig. 1 and 2, #18) and one or more layers consisting of closed cellular polyethylene foam (Fig. 1 and 2, #12). Regarding **claim 2**, the air bubble shaped closed cellular material is inherently an anti-static air bubble shaped closed cellular material (see col. 2, line 35). Regarding **claim 3**, note at least two layers of the air bubble shaped closed cellular material (see col. 4, lines 30-31) and wherein each of the bubble layers has a flat side (Fig. 2, #18) and a bubble side (Fig. 1, #18). Regarding **claim 4**, note bubble side of one of the layers of air bubble shaped closed cellular material (Fig. 2, #18) is positioned to face the bubble side of another of the layers of air bubble shaped closed cellular material (Fig. 2, #18). Regarding **claim 5**, note a layer of the closed cellular polyethylene foam material (Fig. 2, #14) is interposed between the layers of air bubble shaped closed cellular (Fig. 2, #18) material.

5. **Claim 29** is rejected under 35 U.S.C. 102(b) as being anticipated by Kolsky (5,274,846).

Kolsky discloses a method for decreasing musculoskeletal fatigue in humans resulting from static postural stress in a surgical theatre during open operative procedures which method also facilitates maintaining the surgical theatre in a surgically safe environment comprising the steps of: positioning a completely disposable mat on the floor of the surgical theatre prior to or during an operative procedure; the mat comprising a layer of closed cellular polypropylene foam material (see col. 4, lines 30-41) and one or more layers of closed cellular polyethylene foam (see col. 4, lines 30-41); supporting a human on the mat during a period of static postural positioning; disposing of the mat after the conclusion of the operative procedure.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 6–12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tricca et al. in view of Small (4,644,592).

Tricca et al. discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1 and 2, #18) and one or more layers consisting of closed cellular polyethylene foam (Fig. 1 and 2, #12). However, Tricca et al. fails to disclose a base layer including a low-tack adhesive bottom surface and a removable liner releasably attached to the lower surface of the low-tack adhesive. Small teaches that it is old and well-known in the art to have a base layer including a low-tack adhesive bottom surface (Fig. 1, #16) and a removable liner (Fig. 1, #18) releasably attached to the lower surface of the low-tack adhesive (Fig. 1, #16) for the purpose of producing a mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the mat in Tricca et al. with a base layer including a low-tack adhesive bottom surface and a removable liner releasably attached to the lower surface of the low-tack adhesive as suggested by Small in order to produce a floor mat with an upper surface adapted for frictional contact with human body parts.

Regarding **claim 9**, Tricca et al. discloses a mat for decreasing musculoskeletal fatigue in humans during prolonged static postural stress comprising one or more layers of an air bubble shaped closed cellular material (Fig. 1 and 2, #18) and one or more layers consisting of closed cellular polyethylene foam (Fig. 1 and 2, #12). However, Tricca et al. fails to teach anti-static closed cellular polypropylene foam material for the cover layer. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the cover layer in Tricca et al. (Fig. 1, #12; also see col. 2, lines 20-21) to consist of an anti-static closed cellular polypropylene foam material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding **claim 10**, note in Tricca et al. the layers comprising the mat are adhered together and the mat includes a laminating adhesive between the layers to adhere the layers together (see col. 2, lines 6-13).

Regarding **claim 11**, Tricca et al. discloses bubble layers (Fig. 2, #18) and polyethylene foam layer (Fig. 2, #14) are between the base layer (Fig. 2, #16) and the cover layer (Fig. 2, #12). However, Tricca et al. fails to disclose the bubble layers and the polyethylene foam layer being dimensioned to provide the mat with a truncated pyramidal shape. Normally, it is expected that a change in shape of the bubble layers and the polyethylene foam layer would be an unpatentable modification. Under some circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al.* 149 USPQ 47 CCPA 1966.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the bubble layers and the polyethylene foam layer noted in Tricca et al. to provide the mat with a truncated pyramidal shape. One skilled in the art would have been motivated to do so in order to form a floor mat, since it has been held that the change in form or shape of the bubble layers and the polyethylene foam layer would be an unpatentable modification absence of showing unexpected results.

Regarding **claim 12**, note in Tricca et al. the bubble shaped material has less than a 10% thickness loss based on a 0.5 pounds per square inch loading over 15 days utilizing a static test method of 10" x 10" material samples, the closed cellular polyethylene foam material has a density of at least about 1.7 pounds per cubic foot and the polypropylene closed foam material has a density of at least about 0.5 pounds per cubic feet (see col. 2, lines 34-40).

8. **Claims 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tricca et al. (4,574,101) in view of Kolsky (5,274,846).

Tricca et al. discloses a first layer composed of an anti-static air bubble shaped closed cellular material (Fig. 2, #14) having a flat side and a bubble side and a second layer composed of an anti-static closed cellular polyethylene foam material (Fig. 2, #12). However, Tricca et al. fails to disclose a third layer composed of an anti-static air bubble shaped closed cellular material and a fourth layer composed of an anti-static polypropylene closed cellular foam material. Kolsky teaches that it is old and well known in the art to have a third layer composed of an anti-static air bubble shaped closed cellular material (see col. 6, lines 37-38) and a fourth layer composed of an anti-static polypropylene closed cellular foam material (see col. 4, lines 30-35)

for the purpose of producing a mat which offers substantially better support and better energy absorption.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided Tricca et al. with a third layer composed of an anti-static air bubble shaped closed cellular material and a fourth layer composed of an anti-static polypropylene closed cellular foam material as suggested by Kolsky in order to produce a mat which offers substantially better support and better energy absorption.

Furthermore, combining both Tricca et al. and Kolsky provides a first and third layer each composed of an anti-static air bubble shaped closed cellular material having a flat side and a bubble side, a second layer composed of an anti-static closed cellular polyethylene foam material and a fourth layer composed of an anti-static polypropylene closed cellular foam material. However, both fail to teach the second layer over the first layer, the third layer over the second layer and the fourth layer over the third layer. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the layers in both Tricca et al. and Kolsky to teach the second layer over the first layer, the third layer over the second layer and the fourth layer over the third layer, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

9. **Claims 17-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tricca et al. (4,574,101) in view of Kolsky (5,274,846) and further in view of Small (4,644,592).

Tricca et al. and Kolsky in combination both disclose the except for a low-tack adhesive layer and a removable liner attached to the adhesive. Small teaches it is old and well-known in the art to have an adhesive layer (Fig. 1, #16) and a removable liner (Fig. 1, #18) attached to the

adhesive for the purpose of producing a disposable mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided the combination of Tricca et al. and Kolsky with a low-tack adhesive layer and a removable liner attached to the adhesive in order to produce a disposable mat with an upper surface adapted for frictional contact with human body parts.

10. **Claims 22-28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolsky (5,274,846) in view of Small (4,644,592).

Kolsky discloses a first layer including an anti-static closed cellular polypropylene foam material (Fig. 1, #10; also see col. 4, lines 30-38) and a second layer including an anti-static closed cellular polyethylene foam material (Fig. 1, #14; also see col. 4, lines 30-38). However, Kolsky fails to disclose a layer including a low tack adhesive. Small teaches it is old and well-known in the art to have a low-tack adhesive layer (Fig. 1, #16) for the purpose of producing a disposable mat with an upper surface adapted for frictional contact with human body parts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a low-tack adhesive layer in Kolsky as suggested by Small in order to produce a disposable mat with an upper surface adapted for frictional contact with human body parts.

Regarding **claims 23 and 24**, note a layer of an anti-static air bubble shaped closed cellular material (Fig. 3, #32) interposed between the first layer (Fig. 3, #34) and the second layer (Fig. 3, #36). Regarding **claim 25**, note a closed cellular polypropylene foam material top layer (Fig. 1, #10) and one or more layers selected from the group of materials consisting of

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closed cellular polyethylene foam (Fig.1, #14) and air bubble shaped closed cellular materials (Fig. 1, #24). Regarding **claim 26**, note one or more layers is a layer of closed cellular polyethylene foam material (Fig. 1, #14). Regarding **claims 27** and **28**, note one or more layers is a layer of air bubble shaped closed cellular material (Fig. 1, #24).


Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents are cited for further teaching of mats similar to that instantly disclosed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (703) 605-4297. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (703) 308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Catherine Simone
Examiner
Art Unit 1772

March 20, 2003


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

3/20/03